DOCUMENT RESUME

ED 130 665 IR 004 213

| | |
|---|---|
| AUTHOR | Avram, Henriette D. |
| TITLE | The Library of Congress: Toward the 21st Century; a Reexamination and Redirection. |
| INSTITUTION | Library of Congress, Washington, D.C. |
| PUB DATE | Jul 76 |
| NOTE | 14p.; Paper presented at the American Library Association Annual Conference (95th, Chicago, Illinois, July 18-24, 1976) |
| EDRS PRICE | MF-$0.83 HC-$1.67 Plus Postage. |
| DESCRIPTORS | Cataloging; *Library Automation; *Library Networks; Library Research; Library Services; *National Libraries; On Line Systems; Serials |
| IDENTIFIERS | ALA 76; CONSER; Conversion of Serials; *Library of Congress; Machine Readable Cataloging; MARC |

ABSTRACT

The national bibliographic services currently provided by the Library of Congress (LC) include the Machine-Readable Cataloging (MARC) service, LC's Automated Process Information File System, and the Library of Congress Subject Headings. Cooperative projects involving LC include COMARC (Cooperative MARC), a national bibliographic data base for book-form material, and CONSER (Conversion of Serials), a national serials data base. The role of LC in the evolving national network is being coordinated by its Network Development Office. Major activities underway in this office include: (1) coordinating and planning with other segments of the library community; (2) various research projects; and (3) exploration into the resources required to make LC on-line services available outside of LC. (PF)

**********
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
**********

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED130665

# THE LIBRARY OF CONGRESS: TOWARD THE 21st CENTURY

## A Reexamination and Redirection

By

Henriette D. Avram
Special Assistant for Network Development
Library of Congress

When Dr. Daniel J. Boorstin assumed the responsibilities of the Librarian of Congress in November 1975, an early action was the creation of the Task Force on Goals, Organization and Planning. The purpose of the Task Force was to review current activities, recommend ways of improving services, and suggest new services. Among the areas suggested by Dr. Boorstin as requiring review were the following:

1. How well are we serving the nation's libraries?
2. How have new technological resources increased our opportunities for service to traditional constituencies and opened avenues of service to new constituencies?

In Dr. Boorstin's own words, "Today, in this great Library, we are the heirs of two complementary traditions: the tradition of tradition and the tradition of change. If, as I confidently expect, we succeed in the review we now undertake, we can set an example of democratic vitality ... of how we can draw on the full resources of our past to meet the surprising and exacting demands of the future."

In this context, my remarks to you today are concerned with a vital aspect of the services of the Library of Congress (LC)--our traditional

IR004813

role as a national bibliographic center, the expansion of LC's services within that role, and the role of LC in the emerging national library network.

As a major research library and de facto national library, LC has traditionally created and maintained the bibliographic tools for access to its collections. In addition to making these tools available to the library community, LC also acts as a collector and distributor of records created by other institutions.

Because of LC's dual role, the objective of the Processing Department's automation program was defined as an automated bibliographic system to satisfy the internal requirements of LC itself (the Core Bibliographic System) and the needs of the national library community (the National Bibliographic Service). This system is designed to control processing to more effectively produce bibliographic information in a variety of forms (printed, microform, machine-readable, and online), depending on demand and economic justification.

Many of the services originally envisioned for the national bibliographic service are already in operation; others are still in the planning stages. Time does not permit an elaboration of each of these services but I will briefly describe some of the major projects.

The MARC service now covers books in English, French, German, Portuguese, Spanish, Afrikaans, Danish, Dutch, Estonian, Finnish, Frisian, Icelandic, Italian, Norwegian, Romanian, and Swedish, and films, serials, and maps in all languages--approximately 160,000 titles are processed annually. By 1980, LC plans to expand MARC to cover all of its current

cataloging--approximately 250,000 titles annually. It has already entered into an agreement with the National Library of Canada, the Bibliotheque Nationale in Paris, and the National Library of Australia for the free exchange of records in machine-readable form for imprints of the respective countries. Preliminary discussions have begun with several other national bibliographic agencies which most likely will lead to additional agreements. This effort will result in more rapid conversion of titles into machine-readable form by using machine-readable records from other national bibliographies and thus permit LC to more effectively serve the cataloging needs of the United States.

The other significant expansion of the MARC services will result from the implementation of LC's Automated Process Information File System. This system controls items that have entered the technical processing flow and eventually will be represented by regular LC catalog records. Although in-process data is incomplete, these records should be useful to libraries for selection and acquisition purposes as well as alerting them to the future availability of full records for all titles within the scope of MARC.

Both the MARC and the in-process systems operate in an online mode. A variety of search parameters may be used and the system has the ability to display multiple records responding to a query as well as to increase the search specificity by special machine techniques.

LC subject headings in machine-readable form are used for the publication of Library of Congress Subject Headings in printed and microform. The system for the building of the Name Headings file is complete but the name data has not yet been input to the system. LC will distribute

both these files under the MARC Distribution Service. Plans include making the files available online.

There are three significant cooperative projects in which files are being built through the combined efforts of several organizations.

The machine system for the National Union Catalog (NUC) location data base made it possible to publish the Register of Additional Locations in printed and microform and also provides the ability to search the file online. Location data are being received in machine-readable form from other library systems for automatic posting to the file which currently contains approximately 1.75 million titles with 21 million locations.

COMARC (COoperative MARC), conducted with a grant from the Council on Library Resources, is a pilot study. Institutions converting records for their automated bibliographic systems use LC cataloging copy from printed cards, proof sheets, or NUC pages for much of this activity. These records are sent to LC in the MARC communications format where they are processed to remove duplicate titles, compare the remaining titles against the Official Catalog, update access points as necessary, and redistribute the records without charge to COMARC participants and on subscription to other organizations. Whereas COMARC is an effort toward building a consistent national bibliographic data base for book-form material, CONSER is the cooperative building of a national serials bibliographic data base, using the Ohio College Library Center (OCLC) as the computer facility for the remote entry and updating of serial records. In the case of the serials file, the National Library of Canada and LC authenticate appropriate records and the

two ISDS national centers are responsible for the assignment or authentication of the International Standard Serial Number (ISSN) and Key Title. A study is underway to determine the requirements for LC to assume the CONSER management[1/] and operation by November 1977.

In addition to defining the tasks required to meet that target date, the study includes a statement of long-term objectives for serials processing at LC to insure that it will be possible to integrate any short term efforts in a long-range systems design.

It can be seen that the national bibliographic services already made available result from the combined efforts of LC, libraries throughout this nation, and other national bibliographic agencies throughout the world. The national bibliographic service envisioned to date is a service principally concerned with the manufacture and distribution of products. Anticipating that LC cannot possibly catalog all items, the service is being developed to allow for decentralized input. CONSER and COMARC are both evidence of this direction in planning.

Recognizing that the services provided by LC are critical building blocks in a national program, it is important to consider these services in terms of the evolving national network. To give emphasis to this effort and the role of LC in the evolving national network, LC has recently established the position of Special Assistant for Network Development in the Office of the Librarian.

1/ CONSER is presently managed by the Council on Library Resources.

In order to consider any aspect of a system as complex as a national library network, one must begin with certain basic assumptions. There is no guarantee that these assumptions will not change as progress is made and we learn from experience. The initial assumptions of the Network Development Office are:

1. The national network for libraries will develop from the base of existing library systems and networks.

2. Many years will be required for full implementation of the national program.

3. There do not now exist identical internal systems for handling information and these are not likely to be developed in the near term. Each agency has designed its own internal procedures. Compatibility among these diverse systems is being achieved by standardizing the records to be exchanged among them. Agencies participating in the national network thus will retain a high degree of internal autonomy while taking advantage of bibliographic work done by others through a standard medium of exchange.

4. The bibliographic apparatus of LC constitutes an essential building block for the national program.

5. Comprehensive as the bibliographic system of LC is, it cannot perform all the bibliographic tasks or provide all of the bibliographic products and services required by the national network. There is need for a rational division of labor for decentralized cataloging and input and a centralized authority with responsibility for the bibliographic integrity of the national bibliographic data base.

6. National bibliographic control in the United States must be in accordance with international efforts toward universal bibliographic control.

7. Not every institution in the United States should require online access to a single node housing the national bibliographic data base. A hierarchy of access nodes is required.

In addition to the set of assumptions, for convenience in communication and to add clarity to a complex topic, the subject "networking" has been subdivided into four principal areas of concern: the functional considerations of the system, e.g., authority control, cataloging, etc.; the technical considerations of the system, e.g., data base design, telecommunications protocol; the policy considerations of the system, e.g., division of labor, governance, funding, etc.; and the objectives of the system, e.g., inexpensive national telecommunications, resource sharing, etc.

It is too soon to document a detailed program of action for the Network Development Office, but four major activities already underway can be described.

1. Coordinating and planning with other segments of the community.

It is intended to spend considerable time working with the existing systems or bibliographic utilities such as the Washington State Network, BALLOTS, the Ohio College Library Center and others to determine where they are in their development, the services they offer and their plans for growth. Tracking the development of these operational systems should provide useful information regarding possible gaps in necessary functions. In addition, contact will be maintained with such existing systems as SOLINET, NELINET,

AMIGOS, The Bibliographic Center for Research, CLASS, PNBC, WILCO, and the Federal Library Committee, to work with them as they develop their plans for participation in the national network.

The above is being accomplished in two ways:

A series of meetings is being called at LC to discuss with the directors of these systems and networks the issues concerning their development and their roles and also the role of LC in the evolving network. The first meeting, which was informal and exploratory in nature, was held at LC on April 12, 1976. Future meetings will be more structured. The second meeting is scheduled for August 9, 1976, and it is envisioned that the four categories of concern described above will assist in the identification of discussion topics as well as areas needing more detailed work.

Complementing these meetings is the work performed under a contract grant to LC from the National Commission on Libraries and Information Science (NCLIS). The study will include:

a. A review of the current status and plans of major library and network systems in the United States, to state the major characteristics of each and the experiences and results to date. Based on these experiences, the study will identify what appears to be the major missing components to assure greater success in network development.

b. A review of those efforts in national bibliographic control already underway at LC, including international

developments to insure that these provide the components identified as the major missing components and that they are the building blocks required for a national network.

The project report will include a statement of the near term (5-7 years) role of LC in the evolving national program showing, in priority order, those steps LC will need to take to fulfill that role; a summary of status and plans of library and network systems surveyed with a statement of their major characteristics and resultant experiences; a statement of what appears to be the major missing components requiring implementation to assure progress in network development; a statement of the national requirement for a national bibliographic apparatus, to include definition of those parts to be supplied by LC and their proper relationship to the efforts of others; a list of bibliographic products and services required in national bibliographic control, and a statement showing which of these should be the responsibilities of LC.

Close working relationship has been established with the Federal Library Committee. Federal libraries are a very important component of the national network. Many of the present and planned projects under the auspices of the Committee are of interest. Resources are in too short supply for duplication.

2. Research and Development.

The significant project underway in this area is the first phase of a planned three-phase project involving the Research Libraries Group (RLG) and LC. The RLG is a consortium composed of the libraries of Harvard University, Yale University, and Columbia University and the New York Public Library (NYPL). The joint pilot project is to investigate the effectiveness of RLG (initially NYPL and Columbia) directly accessing the MARC file at LC for the purpose of using LC MARC records to build their own machine-readable files. When a record is needed for the cataloging process at one of the RLG libraries, the staff will search the files of the RLG institutions through the use of a video terminal online to the RLG file at the NYPL computer facility. If the record is available on that file, the record will be used by the requesting organization. If the record is not available, the search query will be transmitted to LC where the LC MARC file will be searched and if the record is in the data base, it will be transmitted from LC directly to NYPL, computer to computer.

Statistics will be gathered which will aid the library community in planning future network activities.

The phase 2 and 3 projects are also joint efforts with LC, but are not yet funded, being in the proposal writing stages by RLG. As presently envisioned, Phase 2 will specify the requirements of a system capble of interconnecting regional networks and allowing data exchange among a large number of bibliographic data bases. The third phase will implement the system specified in Phase 2 and result in an operating system at RLG and LC capable of being extended to other participants.

Another projected R&D activity, in the draft proposal stage, is an authority file study which will be concerned with the role of an authority file in a national network system.

Also of interest to network development are the results of the survey to determine the utility of the Register of Additional Locations (RAL) for interlibrary loan, the value of the microform edition, and the identification of other machine-readable data bases from which location reports for the RAL could be obtained.

3. Exploration into the resources required to make online services available outside of LC.

The services described below should be considered pilot in nature until their utility is evaluated. Other online services are also possible and will be considered as they become available in LC.

a. The service being implemented by LC for RLG, i.e., invoking LC programs to search the in-process and MARC files and to transmit "hit" records from LC to NYPL, computer to computer, is a service several other institutions are interested in having. In order to explore interlibrary telecommunications interfaces and the possibility of extending this service to a few other library systems on a pilot project basis, a meeting was held at LC with technical staff from eight other organizations with operational automation systems. Initial reaction indicated serious interest in such a project.

b. The RAL is now online for use by LC staff. Several organizations have expressed interest in having the ability to access this file alone or in conjunction with the MARC file for the purposes of interlibrary loan.

c. In addition to computer to computer transmission, the various files could be made available through a commercial service, e.g., Tymshare or Telenet. The service would allow the searching of LC files and the display of records on CRTs or terminal printers.

d. The MARC International Network.

The MARC International Network Study is being conducted under the auspices of the IFLA Office for Universal Bibliographic Control (UBC) with funds received from several institutions. The contribution for the United States was in the form of a grant made by CLR. The project is composed of two parts--a study of the impact of bibliographic problems in the international network, and a technical study of the communications requirements. Based on the two studies, a report will be prepared by A. J. Wells, formerly of the British National Bibliography, for submission to the International Association of National Librarians. The Special Assistant for Network Development serves on the steering committee guiding the study.

The staff Task Force on Goals, Organization and Planning is performing a full-scale review of LC and its activities. The Task Force is seeking counsel and soliciting ideas from within and outside the Library.

Thus, LC is continuing to reexamine past efforts in the area of bibliographic control, seeking the advice of others on what it should and could be doing to aid other libraries, involving itself in ongoing and developing cooperative bibliographic efforts, and establishing its role in the evolving national system. With the help of the very capable staff of

LC and the valuable input and cooperation of colleagues outside LC, the Library of Congress is going forward toward the 21st century.